

Appl. No. 10/649,005
Response dated September 24, 2004
Reply to Office Action of June 25, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A surface mountable electronic device, comprising:
~~a body with a first surface for mounting the device;~~
~~recessed portions within the first surface having a mounting surface, the~~
~~mounting surface having a plurality of recesses at side edges of the device; and~~
~~a plurality of electrical contacts in said first surface, said electrical contacts~~
~~including first portions which form at least a portion of at least one inner surface of~~
~~said recessed portions, each of which extends from an interior portion of the~~
~~mounting surface and terminates in one of said recesses, and each of which~~
~~conforms to one of said recesses, wherein said recesses and electrical contacts are~~
~~sized to provide offsets between said mounting surface and said electrical contacts.~~

Claim 2 (canceled)

Claim 3 (currently amended): The device of claim 1, wherein at least a portion of said
~~first portions within said recessed portions are substantially parallel to said first~~
~~each electrical contact conforms to at least a portion of a recess that is substantially~~
~~parallel to said mounting surface.~~

Claim 4 (currently amended): The device of claim 1, wherein at least a portion of said
~~first portions within said recessed portions are not parallel to said first~~
~~each electrical contact conforms to at least a portion of a recess that is not parallel to said mounting~~
surface.

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Claim 5 (currently amended): The device of claim 4, wherein at least a portion of said first portions within said recesses said portions of the recesses that are not parallel to said mounting surface are orthogonal to said first mounting surface.

Claim 6 (currently amended): The device of claim 4, wherein at least a portion of said first portions within said recesses said portions of the recesses that are not parallel to said mounting surface are diagonal portions extending diagonally away from said first mounting surface.

Claim 7 (currently amended): The device of claim 1, wherein said first portions within said recessed portions comprise each recess comprises:

a diagonal portion extending diagonally away from said first mounting surface; and

a parallel portion extending substantially parallel to said first mounting surface and connected to the end of, between the diagonal portion furthest away from the first surface and an edge of the device.

Claims 8-12 (canceled)

Claim 13 (original): The device of claim 1, wherein said electrical contacts are heat sinks.

Claim 14 (canceled)

Claim 15 (original): The device of claim 1, wherein the device is selected from a group comprising an opto-electric device and a light-emitting device.

Claim 16 (new): The device of claim 1, wherein each recess comprises:

an orthogonal portion extending orthogonally from said mounting surface; and a parallel portion extending substantially parallel to said mounting surface, between the orthogonal portion and an edge of the device.

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Claim 17 (new): The device of claim 1, wherein each recess extends diagonally from said mounting surface to an edge of said device.

Claim 18 (new): The device of claim 1, wherein one or more of the recesses is bounded on three sides by said mounting surface.

Claim 19 (new): The device of claim 1, wherein one or more of the recesses extends the entire length of the side edge at which it is formed.

Claim 20 (new): Apparatus, comprising:

a printed circuit board having a plurality of pads thereon;

a surface mountable electronic device, comprising:

a body having a mounting surface, the mounting surface having a plurality of recesses at side edges of the device; and

a plurality of electrical contacts, each of which extends from an interior portion of the mounting surface and terminates in one of said recesses, and each of which conforms to one of said recesses, wherein said recesses and electrical contacts are sized to provide offsets between said mounting surface and said electrical contacts; and

conductive adhesive, electrically and mechanically coupling each electrical contact of the surface mountable electronic device to a corresponding pad on the printed circuit board, the conductive adhesive being substantially confined to said recesses.

Claim 21 (new): The apparatus of claim 20, wherein a plurality of said surface mountable electronic devices are mounted in an array on the printed circuit board.